



Name _____

Date _____

Ratios and Rates**Page 1 of 4***Use additional paper as needed.*

1. Use the relationship among ratios, fractions, decimals, and percents to complete the table.

Ratio	Fraction	Decimal	Percent
1:4			
			12.5%
		0.8	
	$\frac{3}{4}$		

2. There are 1.25 girls for every boy at Lincoln Middle School.
- Write this single number as a ratio.
 - The ratio of girls to boys in Ms. Ryan's class is the same as the school ratio. In Ms. Ryan's class there are 10 girls. How many boys are there?

Section B Comparisons

The table below lists just a few of the countries you saw in the table on page 11.

Country	Population	Number of Telephones	Number of Radios
Bolivia	8.4 million	1.26 million	5.5 million
Chad	9.0 million	44,000	1.9 million
Finland	5.2 million	6.3 million	8.4 million
Tonga	102,000	14,500	61,000
Solomon Islands	450,000	7,600	36,000
United States	292.6 million	317 million	598 million

Source: *Encyclopaedia Britannica Almanac 2005* (Chicago: Encyclopaedia Britannica, Inc., 2005).

A fourth column with the number of radios has been added.

1.
 - a. Which country has the fewest number of radios?
 - b. Do any countries have more telephones than radios? If so, which ones?
 - c. Which country has the largest number of radios per person?
2.
 - a. Choose two countries and compare the numbers of people per telephone in an absolute and in a relative way.
 - b. For the same two countries you choose in part a, compare the numbers of people per radio in these countries, both in an absolute and in a relative way.

Ratios and Rates**Page 1 of 2***Use additional paper as needed.*

1. Naomi rented a car for a day. She noted that she drove 150 miles on 7.5 gallons of gasoline.

a. What was Naomi's gas mileage? Show your work.

Naomi's father said, "My car gets much better gas mileage. I drove 72 miles today on 3.75 gallons!"

- b. Is Naomi's father right? Does his car get better gas mileage? Show your work.

2. a. Find the ratio of people to cars if you counted 23 cars and 60 people.

- b. Find the average number of people per car if you counted 23 cars and 60 people.

3. Kirk says, "I found an average of 1.7 people per car. But the answer must be wrong since you cannot have 0.7 person in a car. What would you tell Kirk to explain how it is possible to have an average of 1.7 people per car?"

4. Kirk and Daniel are going to investigate how many people wear jeans on a given day.

At three different locations, they count the number of people who are wearing jeans and the number of people who are not wearing jeans.

Location	Jeans	No Jeans
A (school)	28	7
B (mall)	40	17
C (street)	12	16

- a. Make an absolute comparison of "people wearing jeans" at the three locations.
- b. Make a relative comparison of "people wearing jeans" at the three locations.

To summarize their results, Kirk and Daniel want to write:
In general, we can say that on the day of our survey, about ____ of the people were wearing jeans.

- c. What fraction should be used to complete the blank?
Show your work.
- d. What percent should be used to complete the blank?
Show your work.